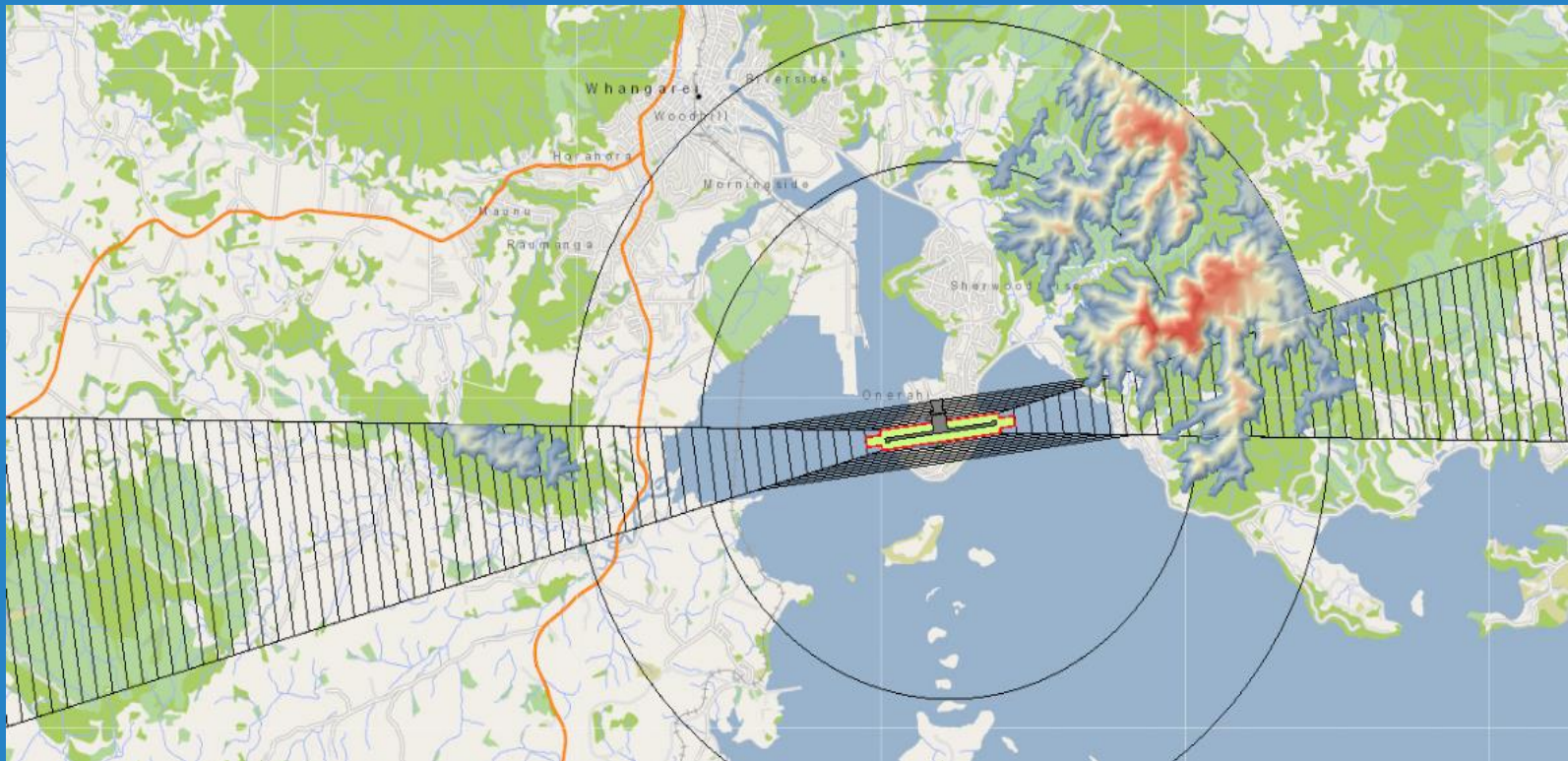


Whangarei Airport Location Options Study

Council Briefing (OPEN)

Thursday, 11 March 2021



Agenda

- Background
- Phase 1 – Onerahi Airport and Port Nikau
- Phase 2 – Airport Location Option Study
- Preferred sites
- Air New Zealand
- Regional perspective
- Economic Value
- Funding discussion
- Questions

What do we want to get from today?

- Refresher - background to the project
- Answer questions about why we should consider moving from Onerahi
- To provide an update on the status of the project

Project Background

- Onerahi Airport - sealed runway installed in the early 1960s.
- Joint venture, with the Crown owning the land and a share in the improvements.
- In 2014 WDC - Strategic review of the Onerahi Airport.
- Beech 1900 / direct Wellington link unavailable
- Airport Location Option Study (ALOS)
- Consultants: Beca; Market Economics: Astral; Campbell Consulting; Reviewers Opus and AECOM



Airport Location Options Study Phase 1

- Assessment of long term capability of Onerahi Airport
- Assessment of Port Nikau as possible replacement site
- Consultants – Beca Ltd
- Reported to Council December 2014



Onerahi and Port Nikau Assessments

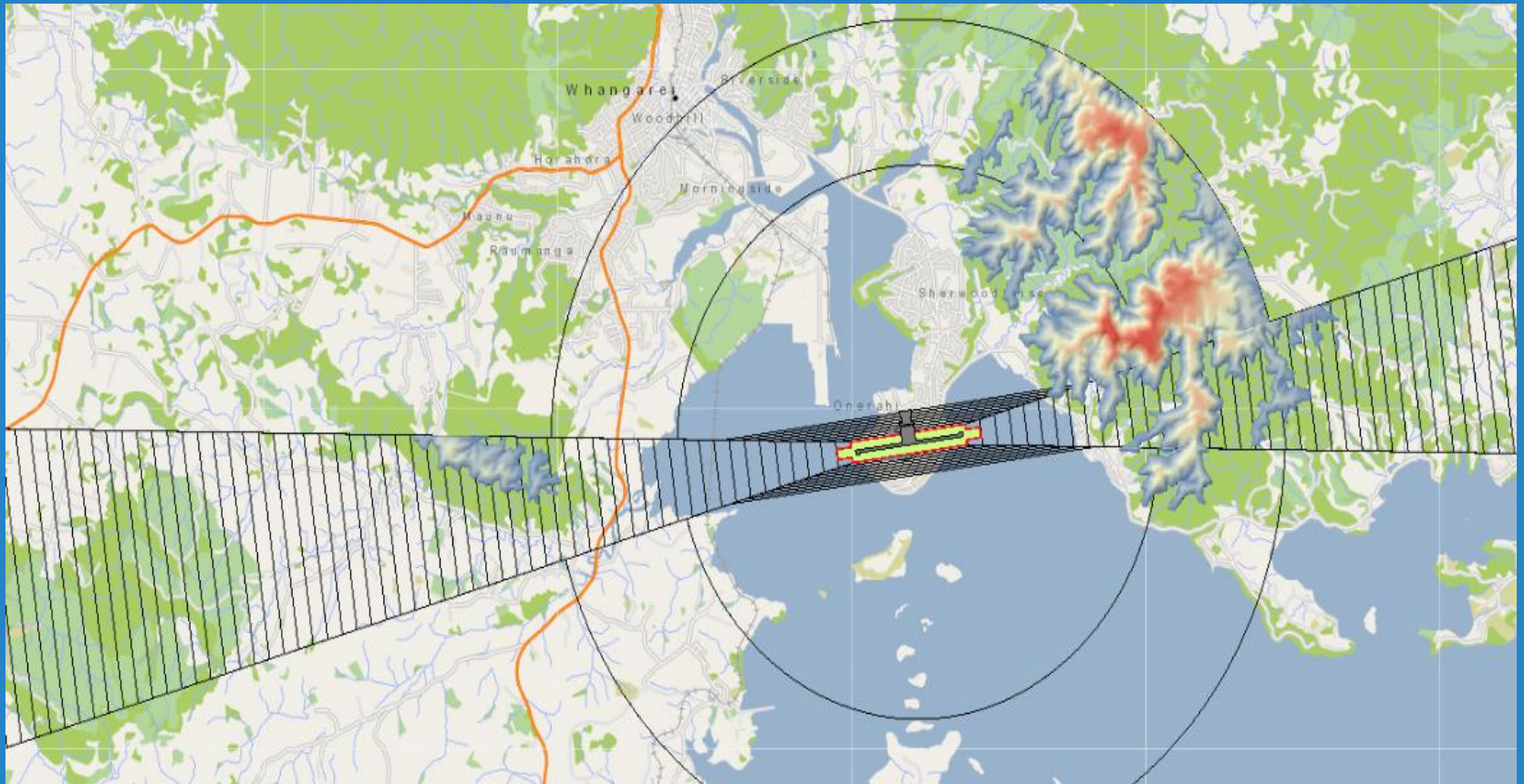
- Onerahi site encompasses sufficient land for future development of the terminal and aprons
- A longer runway and associated RESA is considered necessary to meet current and future aircraft types
- Lack of ability to lengthen the existing relatively short runway and provide required RESA
- Concern for the airport's ability to maintain its current operations given existing and future potential non-compliances.
- Port Nikau site has Obstacle Limitation Surface (OLS) issues and would require significant harbour reclamation to achieve required runway length and Cost.

Issues with Whangarei Airport

- Shortest Runway used by Air NZ. Current replacement (ATR72) for their ageing fleet of Q300's requires a longer runway. Air NZ comment "most compromised airport in NZ"
- CAA compliance issues (Grandfathering 2006)
 - No Runway End Safety Area (RESA) (recommended RESA is 240m at each end).
 - Obstacle Limitation Surface (OLS) severely compromised to the north and east.
 - Both these issues are not resolvable at the current location due to the physical location of the site.



Existing Airport at Onerahi Obstacle Limitation Surface (OLS)



Existing Airport at Onerahi Runway End Safety Area (RESA)



Runway Length Comparison

Aerodrome	Runway Length
Auckland	3,535
Christchurch	3,288
Invercargill	2,210
Hamilton	2,059
Palmerston North	1,902
Dunedin	1,900
Rotorua	1,843
Queenstown	1,839
Tauranga	1,825
Wellington	1,815
Napier	1,750
Woodbourne (Blenheim)	1,425
Taupo	1,386
Nelson	1,347
Gisborne	1,310
New Plymouth	1,310
Timaru	1,280
Hokitika	1,233
Kerikeri	1,190
Whangarei	1,097

Project Objectives (Summarised)

Overall project objective:

"To identify a suitable site for a new airport which meets the long-term air transport needs of Whangarei and the wider region."

Considerations supporting the project objective:

aeronautical

environmental

cultural

social

economic

Project Methodology Overview

Phase 2

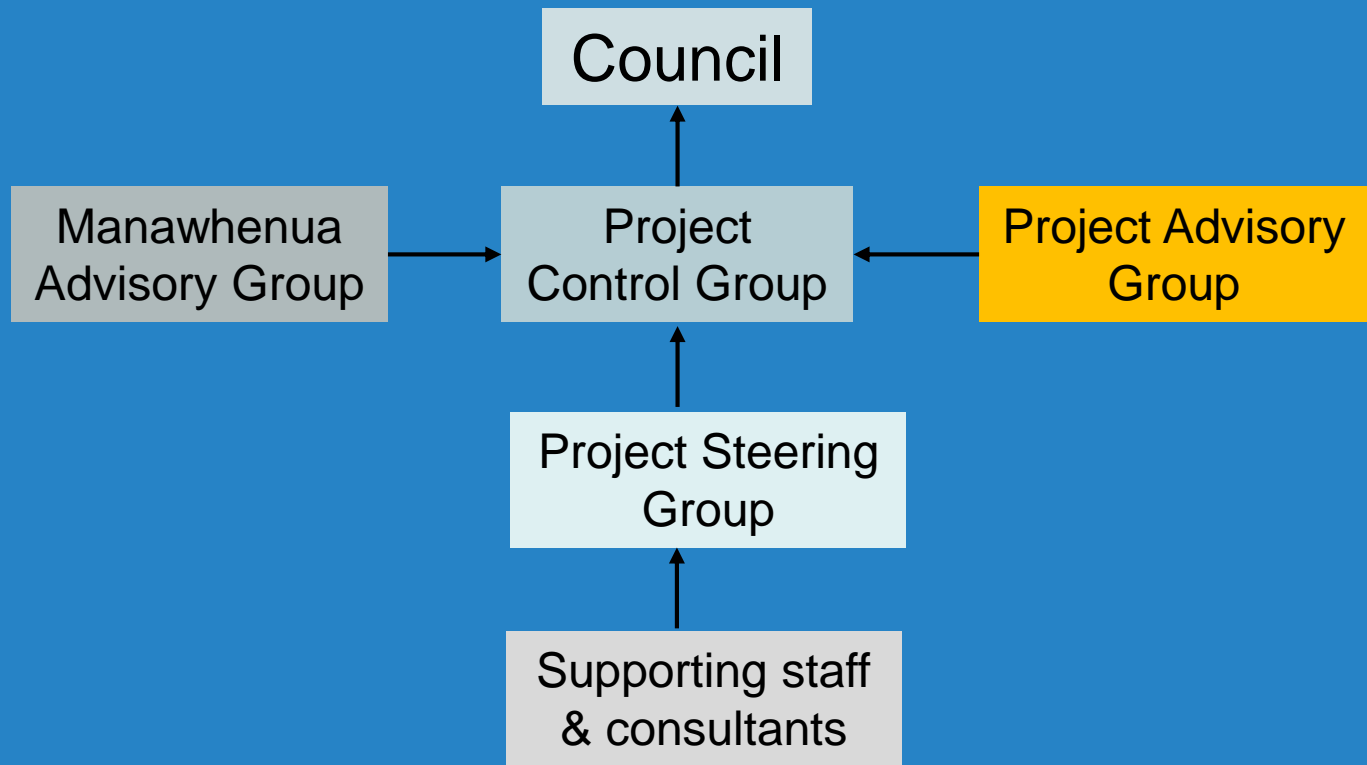
The methodology consists the following tasks;

1. Confirm project objectives, study area boundaries and future facility requirements
2. Establish site evaluation criteria
3. Initial identification of potential aerodrome sites
4. Coarse screening of potential site (Multiple Criteria Analysis (MCA) - long list)
5. Comparative evaluation of shortlisted sites (MCA)
6. Site selection

Infrastructure Requirements

Element	Minimum	Optimum
Runway length	1,500 m	1,800 m
Runway width	30 m	45 m
Total Strip length	1,620 m	1,920m
Total Strip width	300m	300m
RESA length	90 m	240m (Note Wellington)
RESA width	90 m	150m
Runway strip maximum longitudinal slope	1.75%	1.5%
Runway strip maximum transverse slope	2.5%	2.5%

Project Relationships



Long List Site Evaluation Criteria (MCA)

1. Operational Suitability (as per aeronautical requirements)
 - Obstacle Limitation Surfaces
 - Runway usability
 - Site area
2. Land Planning and Consentability
 - Land ownership
 - Planning environment
 - Cultural significance
 - Heritage sites
 - Protected/ scheduled sites and features

Long List Site Evaluation Criteria cont'd

3. Engineering Feasibility

- Clash with existing infrastructure
- Proximity to built-up areas
- Extent of land improvement required
- Need to divert water courses
- Geology/ soil type issues

4. Land Transportation Links

- Proximity to Whangarei City
- Site accessibility
- Other factors in Land Transportation Criteria

Brief for Short List Evaluation

- Refinement of runway alignments
- Assessment land purchase costs and issues
- Assess in more detail the four previous criteria:
 - Operational suitability
 - Planning Issues and consentability
 - Engineering Feasibility
 - Land Transportation links
- Assess cultural and ecological concerns
- Develop cost estimates for comparisons
- Undertake a high level economic analysis

MCA - Short Listed Locations

- Total - Potential 31 Locations
- MCA identified top 5 locations
- More indepth MCA provided top 2 locations (Sites 6 and 9), plus the 5th ranked location South of the city

Suggested Additional Site (South of Whangarei)

- *Site 24a (South of Whangarei)*
- *Recommended to be included as a Preferred site due to...*
 - *Proximity of associated Infrastructure and business environments*
 - *Government priorities*
 - *Potential partners??*
 - *International capability*
 - *Alternative location to sites 6 and 9*

Three Preferred Sites



After further assessment settled on two areas and three sites

Property Assessment

- Identified land likely to be required in order to establish the airport.
- Identified land ownership and registered third party interests
- Provided estimate of likely land purchase costs and other compensation entitlements

Comments from AIAL Chairman and NZ Airports Association Chief Executive

- Secure the national carrier
- Keep room available for other carriers
- Aircraft are getting bigger and will continue that way
- An airport is important for a regional business centre
- Importance of landside activities
- CAA Compliance requirements will get harder – Keep ahead of it.
- Be able to adapt to new CAA requirements.

Discussions with Air NZ staff

- Moving to ATR-72-600 with improved navigation systems
- Q300 fleet being maintained, replacement next 10 to 20 years
- Bay of Island airport tourism focus, Whangarei business, friends & family
- Whangarei airport passenger growth

Discussions with Air NZ staff

- Domestic network continue of out hubs with northland airports out of Auckland
- Working with some of the Tier 2 carriers re-connection to their network
- Alternative power aircraft if/when developed expected to be up to 20 seaters

Economic Development Contribution

Market Economics analysis concluded :

- Indicative Value of the economic impact on Whangarei of having an airport is estimated at \$110m to \$228m (over a 25 year period).
- Indicative Value of economic impact on Whangarei District, Northland and the rest of New Zealand is between \$212 m and \$440m (over a 25 year period).

Suggested Staged Process, in short...

1. Review strategic capability of existing location
2. Identify alternative location/s
3. Try and secure funding from Government
4. Designate or Consent proposed future airport location and secure land.
5. If need be, develop site into a replacement aerodrome for Onerahi, when required. If not, sell the site.

Questions

